

EM-53 (Gerdes:3-7289)

## Accelerated Site Technology Deployment (ASTD) Program Call for FY 2000 Proposals

### Distribution

The U.S. Department of Energy's (DOE) Office of Environmental Management (EM) is seeking DOE Field Office proposals to accelerate environmental cleanup at closure sites through the multiple use of new technologies and processes with an emphasis on decontamination and decommissioning activities.

The Call for Proposals (see Attachment) is structured to facilitate review of the requirements and allow submitters to focus on important aspects of the solicitation. Background information, the project selection process plan, proposal preparation instructions, screening criteria, evaluation factors, and terms and conditions of award are contained in this package.

DOE Field Offices are requested to submit proposals through the DOE Idaho Operations Office. These proposals should identify an EM cleanup need and a new or innovative approach to solving it. A selection committee including representatives from DOE Headquarters, DOE sites, the Focus Areas, and consultants will review the proposals. The selection committee will review and select projects that best meet the programmatic goals and objectives.

If you require further information, please contact Jeffrey Walker of my staff at (301) 903-8621.

Carolyn L. Huntoon  
Assistant Secretary  
for Environmental Management

Attachment

## **U. S. DEPARTMENT OF ENERGY**

**AGENCY:** Department of Energy, Environmental Management (EM-1)

**ACTION:** Accelerated Site Technology Deployment (ASTD) Call for Proposals FY 2000

### **SUMMARY**

The U.S. Department of Energy's (DOE) Office of Environmental Management (EM), through the DOE Idaho Operations Office (DOE ID), is seeking DOE Field Office proposals to accelerate environmental cleanup at closure sites through the multiple use of new technologies and processes with an emphasis on decontamination and decommissioning activities. However, this call will consider proposals addressing other types of high-priority needs. This solicitation is in response to the Defense Environmental Restoration and Waste Management Report language that urges EM to "provide up to \$10 million for technology deployment activities."

EM's Office of Science and Technology (OST) has identified funding to be awarded through a competitive process for projects that utilize new technologies or approaches that will be deployed in FY 2000-2001. Project schedules require site (non-OST) funding for the life of the project (one to three years); there are no prescribed numbers of awards that will result from this solicitation. All proposals must include the following:

- Submission letter from the proposing DOE Site Manager, Site Assistant Manager for EM (AMEM), or equivalent with budget authority.
- Letter of support from the supporting Focus Area.
- Commitment letters from the original deployment site and two subsequent deployment location(s).
- Joint funding or in-kind contributions of at least 50 percent of the project costs from the proposing organization(s), including 25 percent in the first year.
- Completed cost-benefit analysis.

Projects are encouraged to submit proposals that do not exceed a total request of \$2 million from OST funds, unless they show exceptional cost savings, schedule acceleration, and/or other significant benefits. Projects over \$2 million will require additional documentation/justification as requested by the proposal review team to more fully substantiate claims.

Proposals are due on or before March 3, 2000, to DOE-ID at the following address:

Attention: Mr. Jihad Aljayoushi  
U.S. Department of Energy  
Idaho Operations Office  
850 Energy Drive, MS 1235  
Idaho Falls, ID 83401-1563

Proposals must include innovative technologies or processes that have already been demonstrated, or have produced sufficient performance data that they are capable of full-scale, widespread deployment. Accelerated Site Technology Deployment (ASTD) projects should be

highly leveraged with minimal OST funding required for subsequent deployments. Life-cycle cost savings, consistent with those provided in this proposal, must be reported as a change in the life-cycle cost of the associated Program Baseline Summaries (PBSs) upon successful deployment of the technology.

The DOE Site Manager or the appropriate Assistant Manager with budget authority must submit the proposal. Also, signed letters of intent by the site AMEM from at least two subsequent locations must be included with the proposal. The proposal should contain the name and phone number of the technical lead/project manager who will be the contact for the project and would be available to answer questions on the proposal.

All questions or comments on this solicitation should be submitted in writing to Jihad Aljayoushi and be mailed to the above address, submitted electronically via the ASTD homepage at <http://id.inel.gov/astd>, or faxed to (208) 528-2401.

## **1.0 BACKGROUND**

EM directed OST to fund ASTD Projects to support site needs to accelerate cleanup schedules, work within budget constraints, and fill gaps where current technologies do not exist to accomplish specific cleanup actions. The ASTD approach, originally known as the Technology Deployment Initiative, was initiated in 1997 to provide the means and incentives to promote multisite deployment of new technologies and processes that can accelerate cleanup throughout the weapons complex.

Deployment is defined as “the use of a technology or technology system toward accomplishment of one or more site-specific DOE Environmental Management program cleanup objectives as applied to the actual waste requiring management at the site.”

The ASTD approach was designed to offset expenses related to the initial cost of new technology over old. Over the past two years, projects funded through ASTD have accomplished 37 technology deployments and 16 additional subsequent deployments. More importantly, the sites have estimated life-cycle cost savings for these projects of nearly \$1.5 billion due to schedule acceleration and/or use of less expensive, innovative solutions.

## **2.0 OBJECTIVES AND REQUIREMENTS**

The primary objective of the ASTD approach is to work through the Focus Areas and with the sites to accelerate the deployment of innovative technologies or processes with established cost and performance data in EM cleanup activities. The program has the following requirements:

- Non-OST site funding with end user commitment by the DOE Site Manager or appropriate Assistant Manager with budget authority.
- Management commitment to deploy technologies at two additional locations.
- Tie to an end user need [as described in Paths to Closure data].
- Technologies ready for full-scale, widespread deployment (no research and development or demonstration activities).

- Demonstrated cost savings or other significant improvements over the baseline.
- Schedule confidence that initial deployment will occur in FY 2000-2001 (Note: project may be one-three-year duration).
- Demonstrated ability to obtain regulatory and stakeholder approval.

### **3.0 PROPOSAL PREPARATION INSTRUCTIONS**

The proposal shall include two parts: Part I consists of the Technical Proposal, which defines and discusses the problem or site need being solved by the technology and addresses the impact/technical approach, business/management approach, and the regulatory/stakeholder approach for the proposed technology or process. Part II contains the Cost Proposal.

#### **3.1 General**

Proposals are due on or before March 3, 2000, to DOE ID at the following address:

Attention: Mr. Jihad Aljayoushi  
U.S. Department of Energy  
Idaho Operations Office  
850 Energy Drive, MS 1235  
Idaho Falls, ID 83401-1563

The DOE Site Manager or appropriate Assistant Manager with budget authority must submit the proposal. However, the proposal should contain the name and phone number of a technical lead/project manager who will be the contact for the project and would be available to answer questions on the proposal.

##### **3.1.1 Questions on the Solicitation**

All questions or comments on this solicitation should be submitted in writing to Jihad Aljayoushi, and may be mailed to the above address, e-mailed to <http://id.inel.gov/astd/>, or faxed to (208) 528-2401. Questions will be logged and documented. Interested parties are invited to visit the ASTD home page where a listing of frequently asked questions and answers will be posted and updated weekly during the proposal preparation period.

##### **3.1.2 Length and Number of Copies**

One original and five copies of each proposal are required, in addition to an electronic submission. Proposals should be e-mailed to the ASTD Program Office to Jihad Aljayoushi ([aljayoj@id.doe.gov](mailto:aljayoj@id.doe.gov)). The electronic version should contain text only (MS Word), with separate files for graphics (jpg format) and tables (Excel). Proposals shall not exceed 20 pages in length; attachments, the cover letter, and the Focus Areas support/subsequent deployments intent letters are not included in the page limitation. Attachments will not be used to evaluate the proposal and will be used only to substantiate the content contained within Part I and/or Part II of the proposal.

### 3.1.3 Format

Each proposal should contain two parts (Technical Proposal and Cost Proposal). The format of the proposal should follow the sequence of information described in Figure 1.

PROPOSAL FORMAT	
Submittal letter from DOE Site Manager, AMEM, or equivalent with budget authority	
Executive Summary (include brief project description and approach)	
1.0	Introduction and Background
1.1	Problem Identification
1.2	Site Need (reference to Integrated Planning, Accounting, and Budget System)
2.0	Part I - Technical Proposal
2.1	Impact/Technical Approach (Section 3.3.1)
2.2	Business/Management Approach (Section 3.3.2)
2.3	Stakeholder/Regulatory Approach (Section 3.3.3)
3.0	Part II – Cost Proposal
3.1	Cost-Benefit Analysis
3.2	Additional Cost Information (Section 3.4)
Attachments	
<ul style="list-style-type: none"><li>• Letter of support from supporting Focus Area</li><li>• Commitment letters from the original deployment location and two subsequent deployment locations</li></ul>	

## 3.2 Evaluation Criteria

Proposals will be selected for funding using a two-phase evaluation process. Phase I evaluation includes a review of proposals against screening criteria; Phase II includes an evaluation and scoring of the proposals against selection criteria. To be considered for funding, the proposal must be fully responsive to the criteria of each Phase.

### 3.2.1 Phase I - Screening and Relevance Review

Proposals will be evaluated against the screening criteria below. A proposal will be reviewed for relevance to ensure that it meets the intent of the Call for Proposals (e.g., site closure activity/ near-term closure location). Each proposal must contain:

- Submission letter from the proposing DOE Site Manager or appropriate Assistant Manager with budget authority.
- Letter of support from the supporting Focus Area.
- Commitment letters from the original deployment location and two subsequent deployment location(s).

- Joint funding or in-kind contributions of at least 50 percent of the project costs from the proposing organization(s), including 25 percent in the first year.
- Completed cost-benefit analysis.
- Relevant to the EM activities at closure sites.

If the proposal does not meet any one of the listed criteria, it will be screened from further evaluation. Only those proposals that meet all screening criteria will proceed to Phase II.

### **3.2.2 Phase II - Selection Criteria and Weighting**

The Phase II evaluation, scoring, and selection will be made in accordance with the following selection criteria and programmatic considerations. Proposals must be responsive to each criterion.

The selection criteria are based on a maximum of 1000 points and are weighted as follows:

- Criterion 1 (Impact/Technical Approach) has a maximum point value of 400.
- Criterion 2 (Business/Management Approach) has a maximum point value of 300.
- Criterion 3 (Stakeholder/Regulatory Approach) has a maximum point value of 50.
- Criterion 4 (Cost Proposal) has a maximum point value of 250.

The sub-criteria are presented in Sections 3.3 and 3.4.

## **3.3 Proposal Preparation Instructions for Part I - Technical Proposal Overview**

Part I - The Technical Proposal shall provide DOE with the information needed to evaluate proposals against each criterion. The elements defined below summarize information that should be included in the proposal to demonstrate how the technology or process satisfies the evaluation criteria discussed below. Note that the elements are not listed in order of preference or priority.

### **3.3.1 Impact/Technical Approach**

The proposal shall demonstrate:

- A) The relationship of the proposal to site planning data as reported in Paths to Closure. Specifically, the proposal should include the affected PBSs, the site needs, and the disposition map elements (stream data or TSD systems) that will be impacted by the deployment(s). Scoring is higher for deployments that address high priority needs and higher risk disposition map elements. Additional points will be awarded for projects that will either enable or accelerate achievement of site-identified, critical closure- path milestones (Site needs are available from the Field Office's Site Technology Coordination Group Home Pages).
- B) The degree to which the proposed deployment offers an improvement over the existing site baseline(s). The proposal should briefly discuss the current baseline process,

treatment, or requirements, and discuss how this proposal uses proven or advanced technologies to improve upon the baseline process. It is recommended this be accomplished by a concise technology advantage comparison.

- C) The overall scientific and technical merit of the proposal (including the maturity and previous performance of the proposed technologies or processes). The proposal should discuss the performance history of the proposed technology(ies) or process(es) to illustrate their maturity, viability, and deployment potential. The proposal should illustrate that the technology/process has been previously demonstrated and include specific performance data that should also be used in the cost benefit analysis. Fundamental process flow diagrams should be submitted with discussion of technical details (as available) of the technology and system proposed for deployment. Submitted data shall not impact current or future procurements by the proposing sites. Where the proposal includes technologies developed by OST, the proposal shall include the technology identification number. Technology identification numbers can be found within the Technology Management System (TMS). TMS may be accessed at <http://tms.em.doe.gov>.
- D) The degree to which this proposed deployment project integrates multiple site applications, uses industrial partners, and generally accelerates EM efforts (on closure activities/at near-term closure sites) across DOE. The proposal should discuss where proposed technology(ies) or process(es) are to be initially deployed and how subsequent deployment(s) will be integrated between different DOE sites, and the specific commitment of any industrial partners involved. Potential for subsequent additional deployments and resulting broad-based benefits will be evaluated

### **3.3.2 Business Management Approach:**

The proposal shall demonstrate:

- A) Written commitment from the deploying sites and letters of interest from other participating sites that provide assurance of resources (personnel, facility, and equipment) and confidence in the proposing sites' ability to deploy technologies or processes. Specific letters of end user commitment and interest should be submitted to meet requirements of the evaluation criteria.
- B) The soundness of the proposal schedule to deploy in the FY 2000-2001 timeframe and achieve cost savings or other significant benefits using the proposed technology or process. The proposal should submit a deployment schedule for the proposed project and compare this schedule to the existing site baseline(s) or other key planning documents. References should be provided for all schedule documentation.
- C) The qualifications and past performance of the proposers in the deployment of technologies or processes for environmental cleanup. This includes the ability of the designated Federal program manager to effectively manage and communicate with multiple sites. The proposal should demonstrate project management performance and include brief qualification statements for each of the key members of the deployment team, discuss specific projects

that have been deployed by this team, and submit a brief resume for the designated Federal program manager.

### **3.3.3 Stakeholder/Regulatory Approach**

The proposal shall demonstrate:

- A) That all permitting and regulatory requirements specific to this proposal are or will be met. The proposal should discuss the types of permits, appropriate regulatory documents, and other requirements or approvals, specific to this proposal, and required to meet proposal objectives and process schedules. The proposal should demonstrate the ability to meet regulatory compliance and stakeholder acceptance, and include an estimated schedule for completion of these activities.
- B) Capability to integrate across sites/states to include stakeholders, tribal governments, and regulators in resolving barriers to deployment, as necessary. The proposal should provide a brief statement of their capabilities and commitment to integrate across sites/states in resolving barriers to allow for deployment of the technology proposed.

## **3.4 Proposal Preparation Instructions for Part II – Cost Proposal Overview**

Part II - The Cost Proposal should provide:

- A) A detailed cost-benefit analysis that compares validated baseline costs against estimated costs for the entire project life cycle. The proposal must show the project's ability to maximize life-cycle, cost-reduction savings through deployment of a new technology or process as compared to the referenced baseline technology or process. Discussion should include key components of the proposed process that have an impact on cost reduction. Scenarios should be built considering cost benefit for the initial and the subsequent deployments. The cost benefit analysis should be prepared using the EM Standard Life Cycle Cost Analysis Methodology for Deployment of Innovative Technologies.
- B) The reasonableness of project costs and schedule to be evaluated against the proposed work scope. Cost and schedule submitted will be evaluated as being representative and realistic for the work being proposed. The proposal should include any additional information that would facilitate this evaluation.
- C) The degree to which OST funding is leveraged by other entities, including deploying sites, and/or technology partners. The proposal should discuss all non-OST funding that is to be used in this proposed project and the firmness of the funding commitment(s). A table should be submitted that shows, by fiscal year, the funding requests to OST, as well as all leveraged funding and its source(s).



## **4.0 PROPOSAL SELECTION PROCESS**

Proposals will be selected for funding using a two-phase process. In Phase I, the proposals will be evaluated against screening criteria. Those meeting the screening criteria will enter the Phase II evaluation, which involves review, evaluation, and ranking against selection criteria. Both the screening and selection evaluation criteria are detailed in Section 2.0. As with previous ASTD solicitations, DOE ID will coordinate this review. DOE ID and Federal Closure Site Representatives will conduct screening. Senior site team representatives from the Field and Headquarters, along with technical experts, will conduct the Phase II evaluation. The proposals that best address the closure priorities of the DOE complex and provide significant benefit will be selected.

Following proposal selection, sites will be requested to develop a detailed project Technical Task Plan (TTP). The TTP will contain performance criteria and terms and conditions for the individual project with the pertinent Focus Area and a final report commitment. The TTP is an extension of the project proposal and will demonstrate the plan for deployment. As such, each will be required to meet prescribed criteria for acceptance. Failure to meet these criteria will result in discontinuation of the project. Consequently, the deployment plan TTP could be considered a “best and final” proposal. Guidance on TTP preparation and submission will be provided to those with successful proposals following review and project selection.

## **5.0 TERMS AND CONDITIONS**

### **5.1 Notice of Award**

Proposals not meeting the screening criteria will not be evaluated or scored in the Phase II evaluation. Submitters of proposals that do not satisfy the screening or selection criteria will be notified if their proposals are eliminated from any further consideration and the general basis for the determination. Those sites may also request a debriefing to gain further knowledge on why their proposal was not selected.

Proposals selected for funding will be sent a Notice of Award and a request to develop a deployment plan TTP. The request will include a deployment plan TTP guidance document. Each deployment plan TTP will undergo a review and negotiation period to determine the performance criteria and project requirements.

### **5.2 Proprietary Application Information**

Proposals submitted in response to this solicitation should not contain trade secrets and/or privileged, confidential, proprietary, or commercial information.

### **5.3 Proposal Revision**

DOE reserves the right to require proposals to be clarified or supplemented to the extent considered necessary either through additional written submissions or oral discussions.

#### **5.4 Amendments**

If an amendment to this solicitation is required, each DOE individual who received a copy of this solicitation will be notified of the change(s).

#### **5.5 Past Performance**

DOE reserves the right to solicit from available sources relevant information concerning a proposal submitter's past performance and may consider such information in its evaluation.

#### **5.6 Availability of Funds**

The actual amount of funds to be obligated in each fiscal year will be subject to availability of funds. DOE reserves the right to fund in whole or in part, any, all, or none of the applications submitted in response to this solicitation. Funding for selected projects is anticipated to be in place during the third quarter of FY 2000.

#### **5.7 Changes to Original Proposal**

Changes to the original proposal after selection are subject to review by the Change Control Board, led by the Deputy Assistant Secretary (DAS) of OST. As such, the changes to the original scope may not be approved or may be considered to be a new proposal and subject to the review criteria.